



North American Bird Phenology Program

**Understanding global climate change and how it is effecting
bird populations across North America**

WHAT IS PHENOLOGY ?

Phenology is the scientific study of the relationship between natural phenomena (flowering, breeding, migration) and climatic or seasonal changes.

WHAT IS THE BIRD PHENOLOGY PROGRAM (BPP) ?

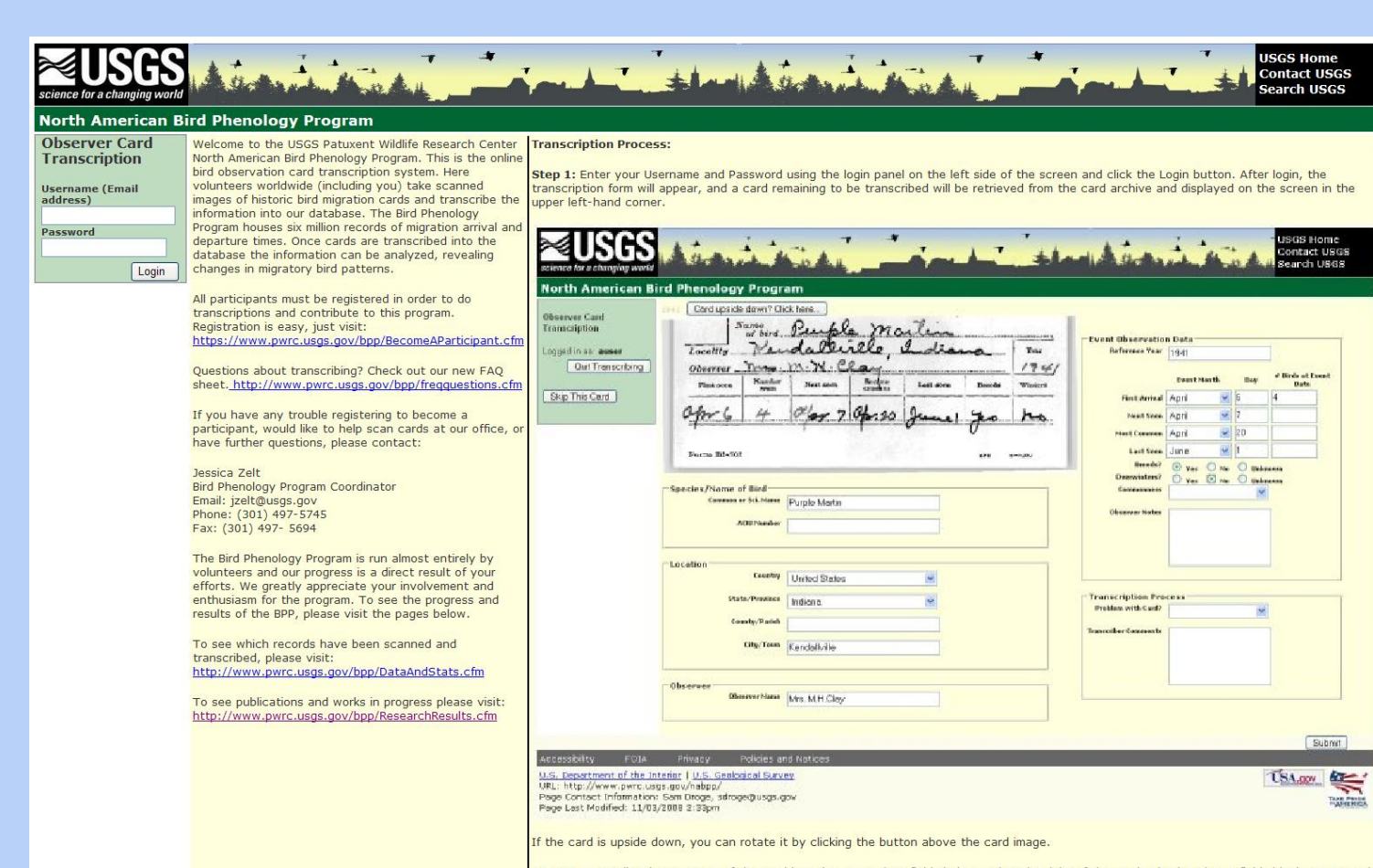
The North American Bird Phenology Program houses a unique and largely forgotten collection of six million Migration Observer Cards that illuminate migration patterns and population status of birds in North America. These handwritten cards contain almost all of what was known of bird distribution and natural history from the Second World War back to the later part of the 19th century. The bulk of the records are the result of a network of observers who recorded migration arrival dates in the spring and fall that, in its heyday, involved 3000 participants. Today, those records are being processed and placed into a modern database for analysis. This information will be used, along with recently collected arrival times of migrant birds, in conjunction with historical weather data to show how migration is effected by climate change. The information from this analysis will provide critical information on bird distribution, migration timing and migration pathways and how they are changing. There is no other program that has this depth of information that can help us understand the effect that global climate change has on bird populations across the country.



HOW DOES THE PROGRAM WORK?



BPP office volunteers scan the migration cards onto the computer



The scanned images are made available on the BPP website (www.pwrc.usgs.gov/bpp/)



Participants register online and transcribe the data seen onto the card into the BPP database



The data can now be analyzed, helping us to learn more about how bird migration is being affected by climate change

PARTICIPATE WITH THE BPP!